

**Beaird Company, Ltd.
BeairdCo
Shreveport, Caddo Parish, Louisiana
Agency Interest Number: 38748**

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Beaird Company, Ltd.
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Shreveport, Caddo Parish, Louisiana
Agency Interest Number: 38748
Activity Number: PER20060001
Proposed Permit Number: 0500-00069-V0**

I. APPLICANT

Company:
Beaird Company, Ltd.
601 Benton Kelly Street
Shreveport, Louisiana 71106

Facility:
BeairdCo
601 Benton Kelly Street
Shreveport, Caddo Parish, Louisiana
Approximate UTM coordinates are 432.200 kilometers East
and 3585.500 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

Beaird Company, Ltd., BeairdCo fabricates steel products by shaping, welding, and heat treating various types of heavy metal stock. Fabrication products are shot blasted, primed, and painted before shipment. BeairdCo fabricates a variety of structures, specializing in the fabrication of wind towers.

Facility emissions emanate from three heat treating furnaces, three painting areas, metal cutting and welding, shot and sand blasting areas, and general combustion sources. The three heat treating furnaces are fired by natural gas and their emissions are controlled by the use of good operating practices.

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Automated blasting using large particle steel shot is performed in an enclosed building. A mechanical collection device recovers approximately 99.97% of the shot. There are no visible emissions from the collector vent. Manual blasting with sand is performed in a semi-enclosed building with 99.9% fallout within the immediate vicinity of the sandblasting area. Natural gas combustion occurs throughout the facility to operate torches, heaters, and miscellaneous production equipment.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application was submitted on January 11, 2006 requesting a Part 70 operating permit for the BeairdCo facility. Additional information dated March 28, 2006 was also submitted.

Project

BeairdCo proposes to increase production as a result of increased manufacturing demands. This modification will increase usage of coatings and solvents, thus Volatile Organic Compounds (VOCs) and Toxic Air Pollutants (TAPs) will increase above the major source threshold level. A CAP will be place on VOC and TAP emissions to allow operating flexibility for custom ordered products.

BeairdCo also proposes to permit the following existing sources:

- One wheelabrator shot blast unit (Point Source No. 1-05)
- Plasma cutters (Point Source No. 3-05)
- Welding emissions (Point Source No. 4-05)
- Sand loading emissions (Point Source No. 2-05)
- Used sand pile emissions (Point Source No. 10-05)
- Metallizing operations (Point Source No. 9-05)
- One diesel storage tank (Point Source No. 8-05)

Emission points 1-90, 2-90, 3-90, 7-90, 9-90 and 10-90 will be revised because of throughput estimates and updated AP-42 factors. Several specific conditions will be modified due to changes in emissions and operations.

Proposed Permit

Permit 0500-00069-V0 will be the initial Part 70 operating permit for the BeairdCo facility.

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Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	6.60	49.01*	+ 42.41
SO ₂	Neg.	0.21	+ 0.21
NO _x	15.50	44.18	+ 28.68
CO	3.80	28.23	+ 24.43
VOC	77.30	106.50**	+ 29.20

***LAC 33:III Chapter 51 Non-VOC Toxic Air Pollutants (TAPs):**

Pollutant	Before	After	Change
Chromium VI (and compounds)	0	2.50	+ 2.50
Copper (and compounds)	0	0.06	+ 0.06
Manganese (and compounds)	0	1.03	+ 1.03
Nickel (and compounds)	0	1.28	+ 1.28
Zinc	0.053	2.50	+ 2.447
Total	0.053	7.37	+ 7.317

****VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

Pollutant	Before	After	Change
Toluene	< 10	-	
Xylene	< 10	40.29	
Methyl Ethyl Ketone	< 10	-	
n-Butyl Alcohol	< 3	8.49	
Methanol	< 3	-	
Other VOC TAPs (each)	< 3	-	
Total	< 25	48.78	+23.78

Other VOC (TPY): 57.72

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IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note
AREA 5 9-05 Metallizing Process	Emission Control and Reduction Requirements and Standards – Maximum Achievable Control Technology (MACT) Requirements. [LAC 33:III.5109.A]	DOES NOT APPLY. Emits only class III TAPs.
EQT 16 Heat Treating Furnace	NSPS Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Intuitional Boilers and Process Heaters. [40 CFR 63.7506]	DOES NOT APPLY. Existing process heater has a heat rating less than 10 MMbtu/hr. There are no requirements for this size unit under the boilers and process heaters NESHAP.
EQT 21 8-05 Gasoline Storage Tank	Storage of Volatile Organic Compounds. [LAC 33:III.2103.A]	DOES NOT APPLY. Tank has a capacity of 250 gallons.
	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY. Tank has a capacity of 250 gallons.
	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY. Tank has a capacity of 250 gallons.

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EQT 21 8-05 Gasoline Storage Tank (Cont'd)	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY. Tank has a capacity of 250 gallons.
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Prevention of Significant Deterioration/Nonattainment Review

NA

Streamlined Equipment Leak Monitoring Program

NA

MACT Requirements

Must comply with the applicable provisions of the National Emissions Standards for Organic Hazardous Air Pollutants, 40 CFR 63 Subpart MMMM Miscellaneous Metal Parts Surface Coating and perform Good Housekeeping Practices as MACT under LAC 33:III 5109.A

Air Quality Analysis

Dispersion Model(s) Used: ISCST3

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
Xylenes	8 hr Average	3,470 $\mu\text{g}/\text{m}^3$	(10,300 $\mu\text{g}/\text{m}^3$)
n-Butyl Alcohol	8 hr Average	604 $\mu\text{g}/\text{m}^3$	(3,620 $\mu\text{g}/\text{m}^3$)

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

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Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

NA

VI. PERIODIC MONITORING

Equipment/operational data monitored by technically sound method daily is required by all affected equipment.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

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VII. GLOSSARY (Cont'd)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per

year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.